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ABSTRACT

Industrial arts programs as part of the total education program can make valuable contributions to career education in Oklahoma. This publication establishes operational guidelines for strengthening the role of industrial arts in the career education context. Goals and subject areas should vary at the different grade levels, elementary through junior and senior high and continuing education. New industrial processes have made many traditional subject areas obsolete. Industrial arts education programs should be evaluated to determine the extent to which they are meeting current needs. A program evaluation rating scale is provided to aid in this determination. (MF)

ED 074303

A GUIDE
FOR INDUSTRIAL ARTS EDUCATION
IN OKLAHOMA

Materials developed by
State Industrial Arts Committee
and
State Supervisor of Industrial Arts
in cooperation with
Oklahoma Curriculum Improvement Commission
and
Curriculum Section
under the asupices of
Oklahoma State Department of Vocational and Technical Education

VT019855

OKLAHOMA STATE DEPARTMENT OF EDUCATION
Leslie Fisher, State Superintendent
1972

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ED 074303

A GUIDE FOR

INDUSTRIAL ARTS EDUCATION

IN

OKLAHOMA

Recommendations of the
State Industrial Arts Curriculum Committee
State Industrial Arts Supervisor
Harold Winburn
Oklahoma Curriculum Improvement Commission
W. D. Carr, Chairman
Curriculum Division
Clifford Wright, Administrator
Peggy Gill, Special Assistant

Oklahoma State Department of Vocational and Technical Education
Francis Tuttle, Director

OKLAHOMA STATE DEPARTMENT OF EDUCATION
Leslie Fisher, State Superintendent
1972

FOREWORD

At some point in time, it becomes necessary for every youth to make a career decision. This could well be the single most important decision that is made in the life of an individual since every facet of ones life is affected by his career choice.

Career education is designed to give every boy and girl a choice, as well as the knowledge and skills necessary to back it up. It is not a substitute for vocational education or general education or college-preparatory education. It is a new concept that blends the three together in a curriculum that is geared to preparation for economic independence, personal fulfillment, and an appreciation for the world of work.

Career decisions are not made at a given time in life. They are the result of experiences and knowledge gained over a period of years. It is thus incumbent upon our educational system to provide every student with as many experiences and as much knowledge as possible about occupational opportunities.

Industrial arts programs as part of the total education program can make valuable contributions to the career education of the boys and girls in Oklahoma. Industrial arts at K-6 and 7-8 grade levels can become the catalyst to merge the various subjects of the total curriculum into a cohesive and extensive orientation and exploration of occupational opportunities. Ninth grade level industrial arts can provide more in-depth exploration for fewer areas than in the K-6 and 7-8 levels. The upper secondary courses should be unit laboratories that permit some specialization.

This publication, produced through the joint efforts of the Industrial Arts Curriculum Committee, Oklahoma Curriculum Improvement Commission, State Department of Vocational and Technical Education, and the State Department of Education, should be of value to the administrators and teachers of industrial arts in improving and enlarging the scope of their service to youth of Oklahoma.

Leslie Fisher
State Superintendent
of Public Instruction

ACKNOWLEDGMENTS

To acknowledge all persons whose participation has been helpful in producing this publication would be extremely difficult. School administrators and members of the State Department of Instruction have supported the project.

The Industrial Arts Curriculum Committee is indebted to various state departments, large-city school systems, the U.S. Office of Education, and numerous other agencies whose publications served as models and sources of information contributing to the completion of the study.

Membership of the Committee

Dr. Joe Beckham, Associate Professor
Industrial Education
Central State University
Edmond, Oklahoma

Mr. Raymond Gann, Associate Professor
Industrial Arts Education
Northeastern State College
Tahlequah, Oklahoma

Mr. Jim Hill
Education Coordinator
Western Electric Company
Oklahoma City, Oklahoma

Mr. Robert LeFebvre
Industrial Arts Teacher
Stillwater High School
Stillwater, Oklahoma

Mr. Joe Reid, Instructor
Industrial Arts and Technical Education
Murray State College
Tishomingo, Oklahoma

Dr. John Tate, Associate Professor
Industrial Arts Education
Oklahoma State University
Stillwater, Oklahoma

Mr. J. A. Walker, Teacher
Junior High Industrial Arts
Ponca City Public Schools
Ponca City, Oklahoma

Mr. Richard Butler, Superintendent
Weatherford Public Schools
Weatherford, Oklahoma

Mr. Ralph Garnett,
Industrial Arts Teacher
Carl Albert High School
Midwest City, Oklahoma

Dr. Philip Kochman
Curriculum Division
State Department of Education
Oklahoma City, Oklahoma

Dr. Donald Mitchell, Associate Professor
Industrial Arts Education
Southwestern State College
Weatherford, Oklahoma

Dr. Claude Stuteville, Associate Professor
Industrial Education
Southwestern State College
Durant, Oklahoma

Mr. Dick Vrooman, Teacher
Rogers Middle School
Oklahoma City Public Schools
Oklahoma City, Oklahoma

Mr. Harold Winburn, State Supervisor
Industrial Arts & Committee Chairman
State Department of Vocational and Technical Education
Stillwater, Oklahoma

Dr. Clifford Wright, Curriculum Director
State Department of Education
Oklahoma City, Oklahoma

PREFACE

An increasingly technological society has focused attention on industrial arts as a curriculum area particularly suited to fulfill its requirements. At the same time industrial arts is being challenged to expand and clarify its function. A re-evaluation of current emphasis in industrial arts, together with the identification of curricular functions which best reflect current technological trends is essential. Contemporary practices in familiar areas such as woodworking and metal working must respond to recent innovations, which involve a decreasing emphasis on hand operations and manipulative skills. Areas such as electronics and power mechanics require more attention as the impact of atomic energy, automation, and space research is revealed and understood.

Growth in any area should be accompanied by an enlightened view of the goals of the program. Content should be selected to provide appropriate scope and sequence, and curriculum areas must be carefully evaluated in terms of student needs. This publication is proposed as a guide for strengthening the role of industrial arts in Oklahoma.

This publication is intended as a guide for the improvement of instruction in industrial arts. It is specifically intended for industrial arts teachers and it is hoped that it will prove helpful in other administrative functions of the school program. It is designed to reflect the philosophy and policies of the State Department of Education and the State Department of Vocational and Technical Education. It is hoped that the guide will serve counselors by more clearly revealing the purpose of industrial arts to the end that the guidance function may be administered with greater insight and understanding. Interested laymen should find the guide a source of information about industrial arts as a unique, but integral, segment of education intended to capitalize on youth's innate desire to explore and construct things.

Additional publications are planned to assist the industrial arts teacher to do a better job in helping boys and girls develop the educational, social, and occupational attitudes on which to base responsibility and self-direction.

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A GUIDE FOR INDUSTRIAL ARTS EDUCATION IN OKLAHOMA

I. INTRODUCTION

A. Industrial Arts Philosophy states that different results are expected at the various grade levels; elementary, junior high or middle school, secondary, and continuing education, thus it is reasonable that goals and subject areas as well as methodology should vary at these operational levels.

B. The advent of new and rapidly advancing industrial processes has made many traditional subject areas of industrial arts obsolete in relation to contemporary industrial scenes throughout the state. It is time to decide if the cultural-historical, leisure time, hobby, and pre-vocational values are important enough to warrant continued offering in the traditional form, or should they be supplemental to more up-to-date subject areas.

C. Industrial Arts has those attributes which challenge students of all levels and interests. As a part of general education, Industrial Arts has an obligation to operate a program that offers something to all students. We must not draw a line on the sex, intelligence, and aptitudes of those students we are willing to accept. All education has this obligation.

D. The past decade has been one of research and development in the area of Industrial Arts Education. Many stylized programs have been developed and promoted as being the answer to the problem of keeping up with industrial and technological advances. All of these programs are effective and meet the objectives for which they are developed, but none of them should be considered to be the total answer to the problem of providing occupational orientation or pre-vocational training in all schools throughout the state.

E. This publication is an attempt to establish operational guidelines that will help the local administrators and teachers to determine the extent to which their programs are meeting the needs of boys and girls in this complex industrial-technical society. The program evaluation rating scale can be used to aid in this determination.

II. PHILOSOPHY OF INDUSTRIAL ARTS

A. That Industrial Arts is an integral part of general education requires no elaboration or embellishment, but the fact that it is a unique function of general education requires that it be defined and its educational role be identified.

B. Industrial Arts is a study of industry and its technology. Through instructional and laboratory experiences, students can learn about the industrial and technical aspects of life. The instructional content deals with the origins and development of industry, and the tools, materials, processes, products, energies, opportunities, organization, and problems involved in converting the earth's resources into material goods. Industrial Arts is a laboratory-type course and as such should always allow for individual

differences. The instructor should be flexible and broad based so that he can provide for the gifted student and the slow learner, as well as the student of average intelligence.

C. The broad and varied content of Industrial Arts makes it difficult to identify. It embodies the content; it exhibits the practices; and it fills the needs of students with varied educational objectives, from those who will enter employment upon graduation, those who will continue education at technical institutes, to those who will enter college in anticipation of preparation for the professions. Industrial Arts should be available at all levels of public education: elementary, junior high or middle school, secondary, and continuing education.

D. Different methods of presentation and different results are expected for the various grade levels. In the elementary grades, Industrial Arts experiences are closely correlated with the basic units of the elementary schools so that the results will be an integrated program of education. The junior high school or middle school Industrial Arts program should be the most diversified and offer a variety of experiences in organized laboratories. In the senior high school, Industrial Arts makes a unique contribution to the total school educational program as it interprets the functions, technology, and occupational opportunities of our modern industrial society.

E. Industrial Arts is a part of the total educational program and is important in the preparation of the student for everyday life. In fact, Industrial Arts has the unique distinction of being able to apply much of the knowledge gained in other general education courses to practical everyday aspects of living. Man has always been able to use his mind to study, to think, and to plan, but he also has had to make a practical application of this ability for progress to take place.

F. One method used for the presentation of material is the "General Industrial Arts Laboratory." This method is usually found in the junior high school or middle school. It is particularly adaptable to this level because it allows for exploration in many areas. However, some small senior high schools should also utilize this method of instruction rather than a unit laboratory in any one area. The unit laboratories are more for specialization and are usually found in the larger high schools where they have laboratories to teach each specific area such as electricity-electronics, power mechanics, drafting, metals, etc. A combination of these two methods is ideal: General Industrial Arts on the junior high or middle school level and a variety of unit Industrial Arts laboratories on the senior high school level for further exploration.

Most of the elementary schools in Oklahoma have self-contained classrooms, which makes it desirable for the classroom teacher to integrate the industrial arts activities into the regular curriculum. Thus, at the K-6 level industrial arts is usually a method rather than a separate subject. Post secondary, adult, and industrial arts teacher education programs are encompassed in the continuing education level of industrial arts, and presentation methods must suit the level and needs of the participants. Local determination should be used to the maximum extent possible within the framework of state-wide guidelines.

III. GOALS OF INDUSTRIAL ARTS PROGRAMS

A. We have stated that different results are expected at the various levels; elementary, junior, senior, and post high school, thus it is reasonable that goals and subject areas as well as methodology should vary at these operational levels.

B. General Goals

1. Develop an Insight and Understanding of Industry and its Place in Our Culture.

2. Discover and Develop Talents, Aptitudes, Interests, and Potentialities of Individuals for the Technical Pursuits and Applied Sciences.

3. Develop an Understanding of Industrial Processes and the Practical Application of Scientific Principles.

4. Develop Basic Skills in the Proper Use of Common Industrial Tools, Machines, and Processes.

5. Develop Problem-solving and Creative Abilities Involving the Materials, Processes, and Products of Industry.

C. Special Goals

1. A special goal for industrial arts is to help meet the need for providing career education for all school youth.

2. Career education is intended:

a. To provide occupational information and a variety of laboratory experiences regarding the world of work.

b. To provide every student the skills necessary to give him a start in making a livelihood for himself and his family.

c. To be continuous throughout the school program and beyond if the individual so elects.

D. The general goals of Industrial Arts are appropriate at all operational levels of the program. However, supplementary objectives are appropriate for the various age and grade levels.

1. High School

a. Provide adequately for basic instruction to meet the needs of at least three types of students:

1) Those desiring to explore more deeply the vocational cultural understandings and consumer concepts of American industry.

2) Those planning to pursue advanced study and [illegible] in such areas as applied and technical science, [illegible]

3) Those who will be entering the labor force be[illegible] graduation or immediately thereafter.

b. Provide practical situations dealing with the industrial w[illegible] of work and understandings of the competitive natur[illegible] industry and business.

c. Provide basic skills which are useful in a variety [illegible] occupations or for occupational adjustment.

2. Junior High School

a. Provide all students with the opportunity to explore indu[illegible] and the world of work.

b. Provide opportunities for attaining knowledge of indus[illegible] vocational and related vocational pursuits and hobbies.

c. Improve the competency level of the students with re[illegible] to choosing, buying, and using the goods and service[illegible] industry.

3. Elementary School

a. Support, enrich, and vitalize the academic curriculum[illegible] make general education experiences more meaningf[illegible] students.

b. Develop cooperative attitudes and self-reliance thr[illegible] problem-solving situations.

c. Develop an understanding and appreciation for the di[illegible] of honest work.

d. Learn how to modify materials to meet students' need[illegible] using basis tools and materials."

IV. ADMINISTRATION

A. State

1. Provides leadership and consulting services to administrator[illegible] the planning, interpretation, and articulation of Industrial [illegible] programs.

"A Guide to Improving Instruction in Industrial Arts, American Vocati[illegible] Association, Inc.

2. Promotes and coordinates Industrial Arts programs at the various school levels throughout the State.

3. Provides leadership in the introduction of experimental Industrial Arts programs and courses.

4. Conducts research in Industrial Arts and seeks means of curriculum enrichment based upon state and national trends and recommendations.

5. Provides Industrial Arts teachers with the latest information pertaining to new and effective methods and procedures of teaching Industrial Arts.

6. Provides leadership in updating the State curriculum materials for Industrial Arts.

7. Plans workshops, seminars, and institutes for the purpose of upgrading teachers and Industrial Arts programs.

8. Encourages participation of Industrial Arts teachers in state and national professional activities.

9. Develops a planned visitation program, making suggestions and recommendations to the administrators and Industrial Arts teachers as needed.

10. Maintains up-to-date information on Industrial Arts teachers and programs in the State for informational and research purposes.

11. Encourages a closer relationship with vocational education at the local and State level.

12. Advises and assists schools in planning new or remodeled facilities.

13. Assists teachers and administrators in interpreting legislation as it applies to Industrial Arts.

14. Assist teachers and administrators in procuring equipment catalogs and specification terials.

15. Provides leadership and assistance in preparing program proposals.

16. Assists in textbook studies preparatory to adoption.

17. Acts as a liaison between teacher-education institutions regarding the needs of the State schools and the Industrial Arts teachers in the field.

18. Evaluates programs of Industrial Arts as requested by local administrators, teachers, or State Department of Education.

19. Establishes and promotes a State Industrial Arts safety program.

20. Serves as a member of the Industrial Arts Advisory Committee providing information and direction as needed.

21. Assists in the recruitment of Industrial Arts teachers.

B. The Industrial Arts Advisory Committee

1. Membership. As presently constituted the membership of the State Advisory Committee is as follows:

a. Two teachers in small cities.

b. Two teachers in large cities.

c. Supervisor from a small city.

d. Supervisor from a large city.

e. State Supervisor of Industrial Arts.

f. Two teachers from state junior colleges.

g. Heads of industrial arts department of state colleges and universities granting four-year degrees.

h. Representative of the graduate school at Oklahoma State University.

i. State Supervisor of Trade and Industrial Education.

j. Director of Secondary Education.

k. Director of Rural and Elementary Education.

l. President of Oklahoma Industrial Arts Association.

m. President of Oklahoma Council on Industrial Arts Teacher Education.

n. Supervisor of Industrial Arts in the city where meeting is held.

o. Secretary-Treasurer of the Oklahoma Industrial Arts Association.

p. Oklahoma Education Association District Chairman

q. State presidents of the Secondary and Post-Secondary student Industrial Arts Clubs.

2. Purpose of the Council

a. Assist in keeping the public and all educators alerted to the needs and importance of Industrial Arts education and to promote good public relations in all areas of the State and nation.

b. Promote the updating of curricula and faculty at all levels.

c. Assist in the review of curricula materials.

d. Assist in establishing state-wide standards, policies, goals, and objectives.

e. Assist in program evaluations.

f. Act as a discussion group for the airing of problems relating to Industrial Arts.

g. Act as an advisory group to the State Association.

C. Local Responsibility. The local school district shall:

1. Provide adequate facilities, equipment, and supplies for program operation.

2. Provide an adequate amount of appropriate instructional materials.

3. Develop courses of study that are acceptable under State standards for specific programs.

4. Provide follow-up on students, if required.

5. Provide a qualified instructor.

6. Encourage teachers to attend conferences and workshops sponsored by the State Department of Education and/or State Department of Vocational and Technical Education.

7. Complete and return forms as required by the State Department of Education and/or State Department of Vocational and Technical Education.

8. Develop local policies regarding programs.

9. Operate within the guidelines set down by the State Department of Education.

10. Select industrial areas to be taught.

11. Develop local advisory committees for approved pre-vocational programs. The members should include people from industry, teachers, counselors, and school administrators.

V. INSTRUCTIONAL PROGRAMS

A. Course Content (Secondary, Grades 10-12)

1. In the senior high school, Industrial Arts should interpret the functions, technology, and occupational opportunities of our modern industrial society. It should be a study of industry and its technology for the purpose of continued exploration or to provide an opportunity to concentrate and specialize in a selected field of industrial work. Thus, for some students the program provides a broad general background, while for others it provides pre-occupational experiences.

2. A variety of industrial areas must be covered so as to allow the students a basis for logically selecting an industrial or technical vocation if they are so inclined. Four or more areas such as power mechanics, electricity/electronics, metals, graphic arts, plastics, drafting, or construction-production oriented woods should be offered.

3. The modern Industrial Arts program challenges the superior student, provides constructive experience for the average student, and encourages the slower and reluctant learner.

B. Course Content (Junior High and Middle School)

1. Industrial Arts in the junior high or middle school constitutes one of the most significant aspects of the school program and represents a substantial portion of the total Industrial Arts function. For many students, Industrial Arts experience in grades seven and eight will be the only formal educational experience they will have in this field. It is desirable to provide opportunities for them to obtain exploratory experiences in the broad areas of construction, communications, manufacturing, and transportation. Through experiences in drafting, woodworking, metalworking, industrial crafts, graphic arts, electricity-electronics, power mechanics, etc., the students can develop an appreciation of industrial design, good craftsmanship, safe work habits, orderly procedures, and an understanding of common tools, machines, and devices.

C. Course Content (Elementary)

1. Industrial Arts experiences in the elementary grades are closely correlated with the basic units of the elementary schools so that the results will be an integrated program of education. Through the use of easy-to-form materials, the children have an opportunity to express themselves creatively in the construction of two- and three-dimensional objects. From such endeavors, they not only benefit from the sheer joy of working with materials, but also from the many opportunities for self-expression and self-discovery. In addition, considerable insight and interest are developed in manipulative activities which parallel those in their parents' "world of work." Occupational information should be included in order to foster an understanding of and a respect for the world of work.

2. Usually the children work in the classroom under the direction of the elementary teacher. However, some schools provide a special room for individual and group projects. As a supplement to the regularly assigned teacher, specially trained consultants or resource teachers are employed to assist and direct teachers and pupils alike. In some instances an Industrial Arts or vocational teacher already on the staff can serve as the resource person.

3. Since the curriculum in the elementary school is not based on ground to be covered or separate subjects, but on child growth

and development, Industrial Arts at this level should be part of an integration of all subject areas and should be considered perhaps as a method rather than a subject viewed as its own entity.

4. Care should be taken to see that these are not just manual training or crafts programs.

D. Class Size

1. On the high school level where power equipment is used and the supervision of students becomes a safety factor, it is recommended that the class size be limited to the number of students commensurate with safe practices and the facilities available.

2. Under the same conditions on the junior high school and elementary school levels, it is recommended that the same criteria noted in 1. above be followed.

E. Scheduling of Classes (Secondary)

1. The class period should be a minimum of 50 minutes in length. It is recommended that scheduling permit 1 1/2 hour periods or that modular scheduling be used where possible.

2. Equal time for each subject matter area should be allotted on a six-week, nine-week, semester, or full year basis. This can be accomplished in a general laboratory or a unit laboratory according to the school enrollment or size. The program should be coordinated throughout the school or district and follow a sequence from junior high school through senior high school.

VI. QUALIFICATIONS OF TEACHERS

A. Teacher qualification requirements are as stipulated in the Teacher Education, Certification and Assignment Handbook published by the State Board of Education.

B. The instructor must have a valid Industrial Arts teaching certificate for the subject matter areas in which he will be teaching. This requires a Bachelor's Degree with a major or minor in Industrial Arts.

C. A minimum of 30 semester hours in Industrial Arts courses is required for a standard secondary school certificate.

D. The elementary school instructor should have a valid elementary education certificate and three (3) hours in Industrial Arts.

E. Work experience in one or a variety of industrial areas is highly recommended but not required.

F. Recertification will follow the requirements as set by the division of certification and the local school boards for regular teacher certification.

VII. INDUSTRIAL ARTS TEACHER EDUCATION

A. Teacher Training is offered at many four-year colleges and universities across the nation. Six Oklahoma senior colleges and three State universities award degrees in Industrial Arts. Additionally, six State junior colleges offer transfer programs in Industrial Arts Education.

1. Universities:

   a. Central State University, Edmond, Oklahoma

   b. Langston University, Langston, Oklahoma

   c. Oklahoma State University, Stillwater, Oklahoma

2. Senior Colleges:

   a. East Central State College, Ada, Oklahoma

   b. Northeastern State College, Tahlequah, Oklahoma

   c. Northwestern State College, Alva, Oklahoma

   d. Panhandle State College, Goodwell, Oklahoma

   e. Southeastern State College, Durant, Oklahoma

   f. Southwestern State College, Weatherford, Oklahoma

3. Junior Colleges:

   a. Connors State College, Warner, Oklahoma

   b. Eastern Oklahoma State College, Wilburton, Oklahoma

   c. Murray State College, Tishomingo, Oklahoma

   d. Northern Oklahoma Junior College, Tonkawa, Oklahoma

   e. Northeastern Oklahoma Junior College, Miami, Oklahoma

   f. Oklahoma Military Academy, Claremore, Oklahoma

B. It is recommended that Industrial Arts teachers work to stay up-to-date on new teaching procedures and industrial changes. Credit for work experiences can be arranged through teacher-education departments. Summer workshops and in-service training programs should be used to the maximum extent possible.

VIII. GUIDANCE FUNCTIONS

A. Guidance in Industrial Arts provides educational, social, and occupational information and meaningful tryout activities for children, youth, and adults that serve as the basis upon which these students can assume responsibility

for their self-direction. While this guidance function is not the exclusive responsibility of Industrial Arts, this subject field is rich in opportunities to initiate many of the guidance functions of the school's educational program.*

B. The Industrial Arts teacher should be an active participant in the school guidance program. This requires working with the counselors and other teachers. He can provide occupational information beyond the "local helpers" approach, arrange for and conduct field trips, and conduct job surveys and other services to the overall guidance program. These activities are generally a part of the Industrial Arts program.

IX. YOUTH ORGANIZATIONS

A. It is recommended that Industrial Arts Clubs be organized and affiliated with the American Industrial Arts Association. However, this is not a requirement for program approval.

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*American Council of Industrial Arts Supervisors, Guidance in Industrial Arts Education for the 70's. American Industrial Arts Association.

APPENDIX A

AN APPROVED PROGRAM FOR PRE-VOCATIONAL INDUSTRIAL EDUCATION

This program should be a study of industry and its technology for the purpose of pre-vocational and general education. Through instructional and laboratory experiences, students should learn about the industrial and technical aspects of our society.

A variety of industrial areas must be covered so as to allow the students a basis for logically selecting an industrial or technical vocation if they are so inclined. Four or more areas such as: power mechanics, electricity, metals, graphic arts, plastics, drafting, or construction-poduction oriented woods must be offered.

Equal time must be allotted on a six-week, nine-week, semester, or full-year basis. This can be accomplished in a general shop or a unit shop according to the school enrollment or size. The program should be coordinated throughout the school or district and follow a sequence from junior high school through senior high school.

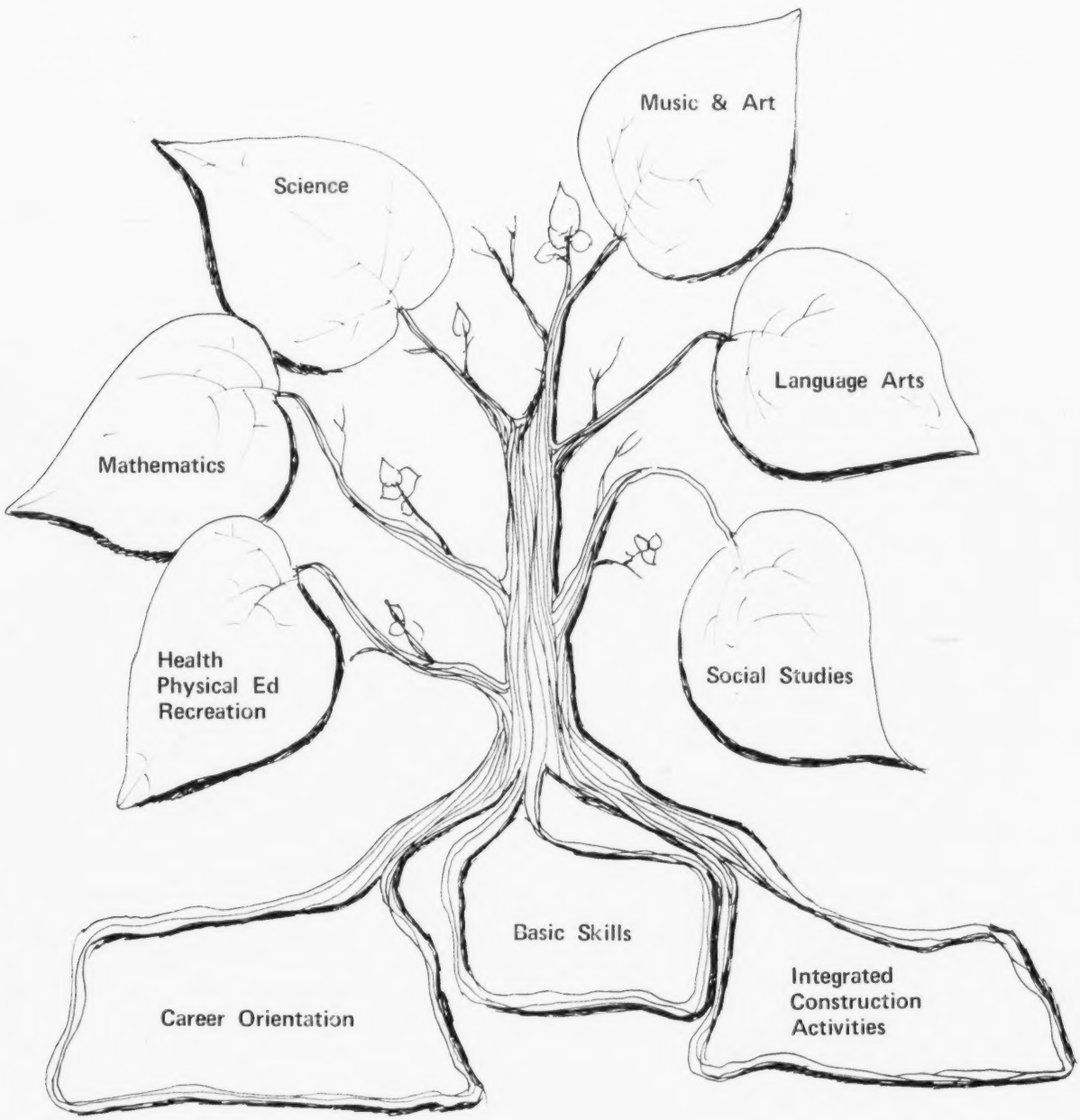
To qualify for and receive funding, these programs must have and maintain the following:

1. Student personnel and cleanup system.
2. Adequate safety program.
3. An adequate facility which is well lighted and ventilated.
4. Course of study and lesson plans.
5. An adequate operational budget for supplies and equipment.
6. Adequate equipment in all areas to be taught.
7. A well qualified instructor who is willing to teach this type of program.
8. Provide for care and maintenance of equipment.
9. Orientation to the world of work consisting of job opportunities, qualifications, wages, and working conditions in the industrial areas being taught.
10. Supply information in regard to high school and post high school trade and technical programs.
11. Support in-service teacher-training programs as recommended by the state supervisor.

A minimum number of these programs will be funded, and they will be high quality programs if they continue to be funded and keep the equipment purchased by the State Department.

APPENDIX B

Industrial Arts K-6



Industrial Arts at level K-6 can be thought of as a method rather than a separate subject.

APPENDIX B-1

Industrial Arts 7-9

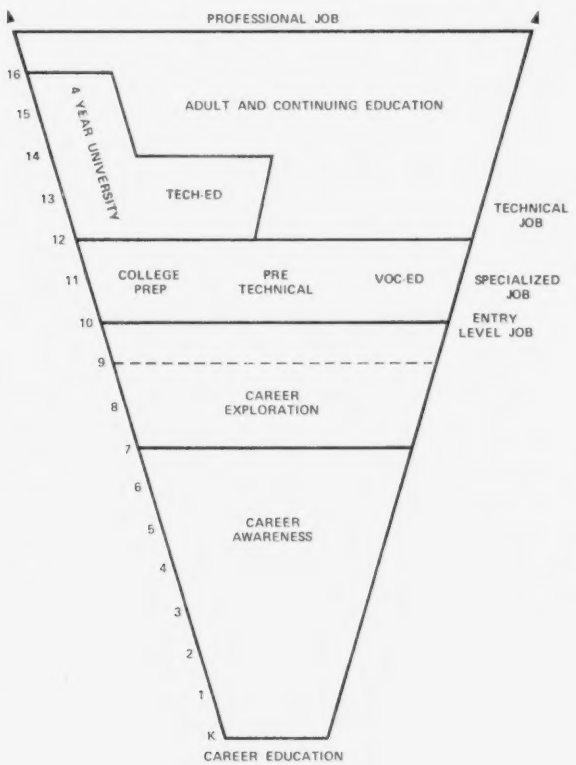
APPENDIX C

CAREER EDUCATION

About 54 percent of high school graduates go on to higher education. About 12 percent have prepared for employment through vocational-technical training which leaves about 34 percent, or 1/3, of the high school graduates, neither prepared for college nor work. Latest Bureau of Labor statistics show that only 2 of every 10 jobs will require a college degree, leaving the other 8 jobs open to high school graduates or perhaps some non-degree post secondary training.

The career education concept is a remedy for the situation described above. Students must be prepared for work and college and the choice should be with the individual. He should be able to leave education for work or work for education without penalty.

Dr. Sidney High, Chief, Vocational Education Personnel Branch, USOE has developed a graphical representation of a school based model for career education. The illustration, with some modification, appears on the following page. Interpretation of the illustration shows that industrial arts programs can fit and can make valuable contributions to the success of a career education program. At the K-6 level, for instance, career awareness can be supplemented and enhanced by integrated activities that introduce basic skills with materials and processes.



APPENDIX D

EVALUATION RATING SCALE

The evaluation scale for the instrument provides a choice of eight rating categories. Each item is scored by using an appraisal based on accepted standards as they appear to the faculty, the administration, and the visiting evaluators.

Definition of Scale:

5 Approved with Commendation - a mark of five indicates this item is performed or exists to the extent of going significantly beyond required standards. This reflects a consistantly high level of effectiveness.

4 Approved above Standards - a mark of four indicates this item is performed or exists to the extent of exceeding requirements of the minimum standards but may include some variability of quality. This reflects a generally high level of effectiveness.

3 Approved - a mark of three indicates this item is performed or exists to the extent of meeting minimum standards. It shows a generally accepted level of effectiveness.

2 Advised - a mark of two indicates this item is performed or exists in a questionable manner at the level of effectiveness sufficient to require action to improve the condition.

1 Conditional - a mark of one indicates this item is performed or exists to an extent so deficient that it needs to be corrected immediately.

0 Disapproved - a mark of zero indicates this item fails to qualify for any other classification and is unacceptable.

M A mark of M indicates this item is missing but is needed for an effective program.

NA A mark of NA indicates this item does not apply.

APPENDIX E

OKLAHOMA STATE DEPARTMENT OF EDUCATION

EVALUATION INSTRUMENT

_____ Industrial Arts

(grade level)

I. PHILOSOPHY AND OBJECTIVES

A. The underlying philosophy of the Industrial Arts program includes the following principles:

_____

_____

_____

_____

_____

_____

_____

_____

B. Principal objectives of the Industrial Arts program may be stated below:

_____

_____

_____

_____

_____

_____

_____

_____

II. PROGRAM ORGANIZATION

A. Textbooks and supplemental materials

Title and Author	Grade Level	Subject	Copyright Dates	Rating

Average rating this area: _____

B. Learning/Teaching Activities

1. Philosophy as written
   - a. is clearly stated and understood _____
   - b. is acceptable by current educational standards _____
2. Course objectives
   - a. are current _____
   - b. can be identified _____
   - c. are measurable in terms of student accomplishment _____
3. Planning and organization
   - a. of instructional material _____
   - b. laboratory activities _____
   - c. student personnel (organized clean up, tool check, etc.) _____

Rating

4. Preparation of subject matter

   a. classroom lectures _____

   b. demonstrations _____

   c. course outline (is it current, relevant, and being used) _____

5. Atmosphere (laboratory/classroom)

   a. instructor's attitude toward students, course, and school _____

   b. student's attitude toward instructor and course _____

6. Utilization of teaching aids

   a. audiovisual materials _____

   b. mock-ups _____

   c. teacher prepared materials (printed handouts) _____

7. Supervision of laboratory work

   a. use of instructor's time _____

   b. control of students _____

8. Motivation of students

   a. competition and clubs _____

   b. field trips _____

   c. attractive displays of projects, exercises, etc. _____

9. Safety

   a. classroom instruction _____

   b. required tests _____

   c. procedures (should fires or accidents occur) _____

Average rating this area: _____

C. Equipment and Materials

1. Machine and power tools

		Rating
	a. correct type, size and quantity	_____
	b. mechanical condition	_____
	c. appearance (painted and clean)	_____
	d. guards (proper type and being used)	_____
	e. arrangement or location	_____
2.	Hand tools	
	a. correct type, size and quantity	_____
	b. condition	_____
	c. accessibility and arrangement of storage	_____
	d. accountability	_____
3.	Work stations	
	a. proper type and adequate number	_____
	b. well located or arranged	_____
	c. proper utilization	_____
4.	Fire protection equipment	
	a. correct type	_____
	b. adequate amount	_____
	c. properly located and identified	_____
	d. ease of accessibility	_____
	e. condition	_____
5.	Eye protection equipment	
	a. proper type (meets State requirements)	_____
	b. adequate amount available	_____
	c. condition	_____
	d. proper utilization	_____
	e. sanitation	_____

		Rating
6.	First aid kit (State approved supplies)	_____
7.	Protective clothing (aprons, etc.)	
	a. proper type	_____
	b. cleanness	_____
8.	Course materials	
	a. tests	_____
	b. safety rules	_____
	c. teaching aids (mock-ups, charts, sample projects, etc.)	_____
	d. teacher prepared printed materials	_____
	e. audiovisual materials	_____
9.	Audiovisual equipment	
	a. proper type	_____
	b. availability	_____
	c. condition	_____
	d. utilization	_____
10.	Furniture (desk, lockers, etc.)	
	a. student (proper type and amount)	_____
	b. instructor (proper type and amount)	_____
	c. condition	_____
	d. arrangement or location	_____
11.	Supplies	
	a. adequate amount	_____
	b. proper storage	_____
	c. accountability	_____
	Average rating this area:	_____

Rating

D. Classroom and Facility

1. Floor space

   a. adequate amount _____

   b. proper design or shape _____

   c. utilization _____

2. Lighting

   a. correct type and amount _____

   b. arrangement or location _____

3. Ventilation

   a. proper type and amount _____

   b. special areas (welding, finish, etc.) _____

4. Appearance

   a. cleanness _____

   b. orderly, pleasant atmosphere _____

5. Restroom and wash facilities

   a. Accessibility _____

   b. properly equipped _____

   c. cleanness _____

Average rating this area: _____

E. Evaluation

1. Classroom

   a. testing _____

   b. participation _____

2. Laboratory

   a. projects, exercises, and experiments _____

   b. attitude _____

Rating

3. Recordkeeping

a. grades _____

b. progress charts _____

Average rating this area: _____

III. CURRICULUM PLANNING AND DEVELOPMENT

A. Administration

1. provides supervision and leadership _____

2. works with the instructor _____

Average rating this area: _____

B. Instructor

1. provides assistance in selection and development of instructional materials _____

2. provides technical knowledge in area of speciality _____

Average rating this area: _____

C. Allows for periodic evaluation and revision _____

D. Professional materials available and utilized _____

E. Guidance Program

1. certified _____

2. advanced degrees _____

3. workshops or institutes _____

Average rating this area: _____

IV. TEACHER QUALIFICATION

A. Formal Education

1. certified _____

2. advanced degrees _____

3. workshops or institutes _____

Average rating this area: _____

Rating

B. Supports Professional Organizations

1. local _____
2. State _____
3. national _____

Average rating this area: _____

C. Demonstrates Professional Attitude

1. attends educational meetings and conferences _____
2. ethical _____
3. interested in the improvement of self and education _____

Average rating this area: _____

V. SELF-EVALUATOR'S COMMENTS

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